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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,450	09/30/2003	Charles L. Kaufman	ITW7510.072	2449
33647	7590	09/08/2004	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, LLC (ITW)			SHAW, CLIFFORD C	
14135 NORTH CEDARBURG ROAD			ART UNIT	
MEQUON, WI 53097			PAPER NUMBER	

1725

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/605,450	KAUFMAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Clifford C Shaw	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-16 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7-10, 17, and 22 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 18-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

**Detailed Action**

1.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.) Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Arantes et al. (5,512,726). Figures 1 and 2 and the discussion at column 4, lines 45-60 disclose a wire feeder with features claimed, including: an output 12, connectable to a gun assembly 44; a controller discussed at column 4, lines 45-60 configured to determine the type of gun assembly; and a motor assembly at 10.

3.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.) Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arantes et al. (5,512,726) taken with Lanouette et al. (6,563,085). The patent to Arantes et al. (5,512,726) discloses the subject matter claimed except for explicit mention of controlling a MIG welding gun as in claim 10 and except for explicit mention of setting the output mode of a wire

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drive assembly as in claim 22. These differences do not patentably distinguish over the prior art.

At the time applicant's invention was made it would have been obvious to have used the arrangement of Arantes et al. (5,512,726) to control a MIG welding gun and to control wire feed parameters, the motivation being the teachings of Arantes et al. (5,512,726) that it is advantageous to control the wire feed parameters of a MIG system in response to data encoded on welding items (see the discussion in column 1 of Lanouette et al. (6,563,085) and the discussion of element 102).

5.) Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arantes et al. (5,512,726) taken with Lanouette et al. (6,563,085) as applied to claims 10 and 22 above, and further in view of either one of Ihde et al. (6,627,849) or Blankenship (5,357,076). The only aspect of the claims to which the rejection above does not apply is the provision for control based on the configuration of pins in cable connectors. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any well known encoding arrangement to accomplish the function discussed by Arantes et al. (5,512,726) at his column 4, lines 45-60. In particular, it would have been obvious to have used a control scheme based on pin configuration as claimed, the motivation being the teachings of either one of Ihde et al. (6,627,849) or Blankenship (5,357,076) that such is advantageous for controlling a machine tool system controller (see the discussion in column 4 of Ihde et al. (6,627,849) and the discussion at columns 8 and 9 in Blankenship (5,357,076)).

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6.) Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arantes et al. (5,512,726) taken with Lanouette et al. (6,563,085) and taken with either one of Ihde et al. (6,627,849) or Blankenship (5,357,076) as applied to claims 7 and 17 above, and further in view of Rokujio et al. (4,404,457). The only aspect of the claims to which the rejection above does not apply is the provision for wire feed control for constant velocity or constant torque. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have configured the system of Arantes et al. (5,512,726) to control for any conventional wire feed parameter. In particular, it would have been obvious to have controlled for constant torque or constant velocity, the motivation being the teachings of Rokujio et al. (4,404,457) that such is advantageous (see elements 8 and 18 in figure 2 of Rokujio et al. (4,404,457)).

7.) Claims 3-6 and 18-21 are objected to for depending from rejected claims, but would be given favorable consideration if recast in independent form to include all of the limitations of the parent claims. None of the prior art of record teaches or suggests control based on detection of motor assembly impedance in the manner set forth in the claims.

8.) Claims 11-16 are allowable over the prior art of record. None of the prior art of record teaches or suggests control based on detection of motor assembly impedance in the manner set forth in the claims.

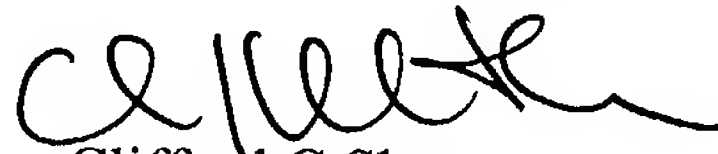
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9.) The patent to Yokoyama et al. (6,563,087) is cited to show a prior art system wherein a system controller is configured based on different data encoded onto respective different tools that are controlled by the system.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Clifford C Shaw  
Primary Examiner  
Art Unit 1725

September 6, 2004